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19305A MLRS, MISSILE NUMBER BN-013, BN-009, BN-010, BN-011, BN--ETC(U)
JUL 81 D C KELLER

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LEVEL II

DR 1193
July 1981

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METEOROLOGICAL DATA REPORT,

19305A MLRS,
Missile Numbers BN-013, BN-009, BN-010,
BN-011, BN-012, V02-007,
Round Numbers V-163/MD-29, V-164/MD-30,
V-165/MD-31, V-166/MD-32, V-167/MD-33, V-168/MD-34
11 July 1981,

by

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Program Support Coordinator
Phone Number (505) 679-9568
AVN Number 349-9568

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of the 19305A MLRS, Missile No. BN013, BN009, BN010, BN011, BN012, V02-007, Round No. V163/MD32, V164/MD30, V-165/MD31, V166/MD32, V167/MD33, V168/MD34 presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

CONTENTS

INTRODUCTION

19305A MLRS, Missile Numbers BN-013, BN-009, BN-010- BN-011, BN-012, and Vo2-007, Round Numbers V-163/MD-29, V-164/MD-30, V-165/MD-31, V-166/MD-32, V-167/MD-33, and V-168/MD-34, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1200, 1200:05, 1200:10, 1200:14, 1200:19, and 1200:23 MDT, 06 July 1981. The scheduled times were 1200, 1200:04.5, 1200:09, 1200:13.5, 1200:18 and 1200:22.5 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained in the following methods:

1. Observations:

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}C$), relative humidity, dew point ($^{\circ}C$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

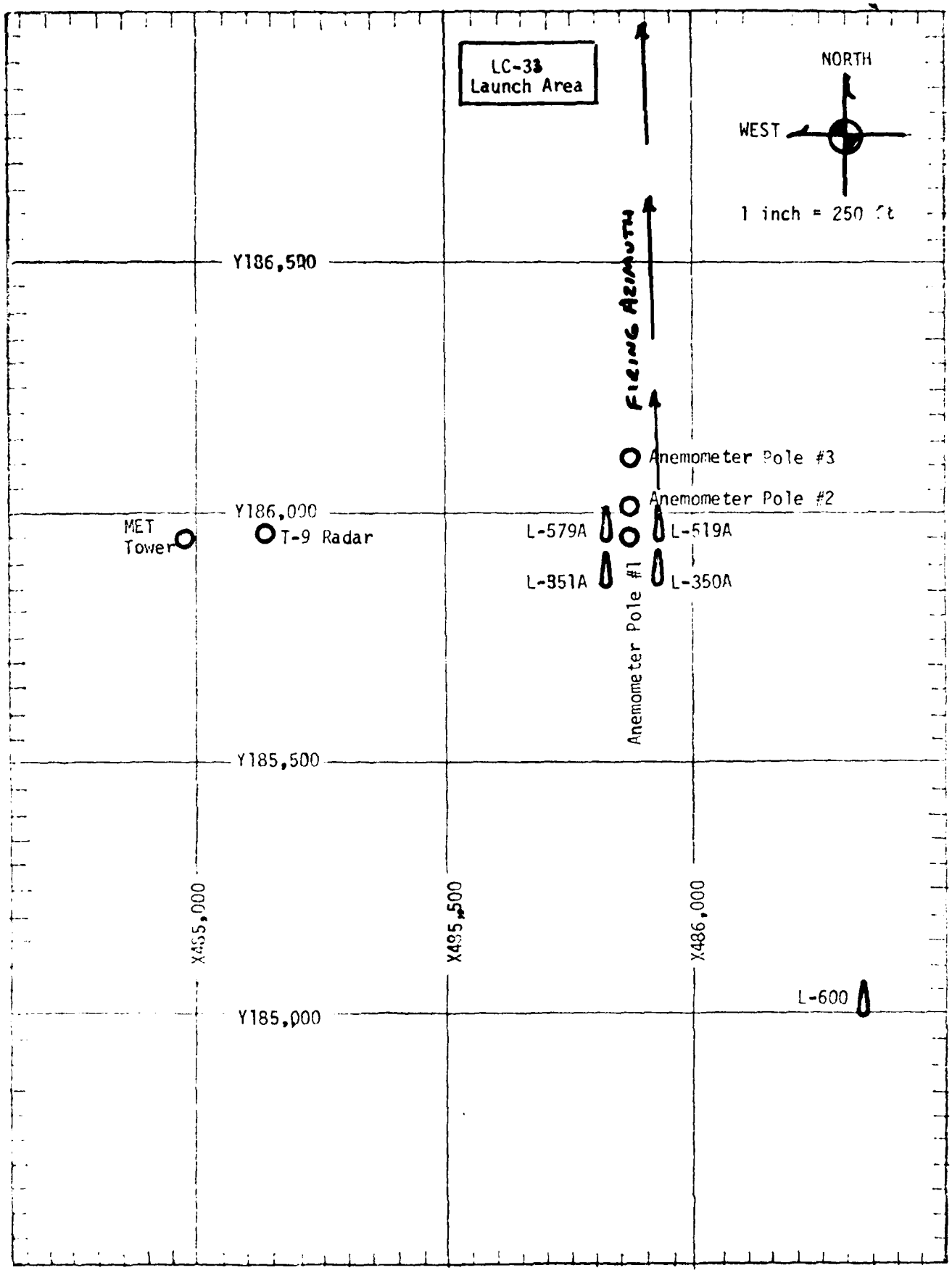
b. Upper Air:

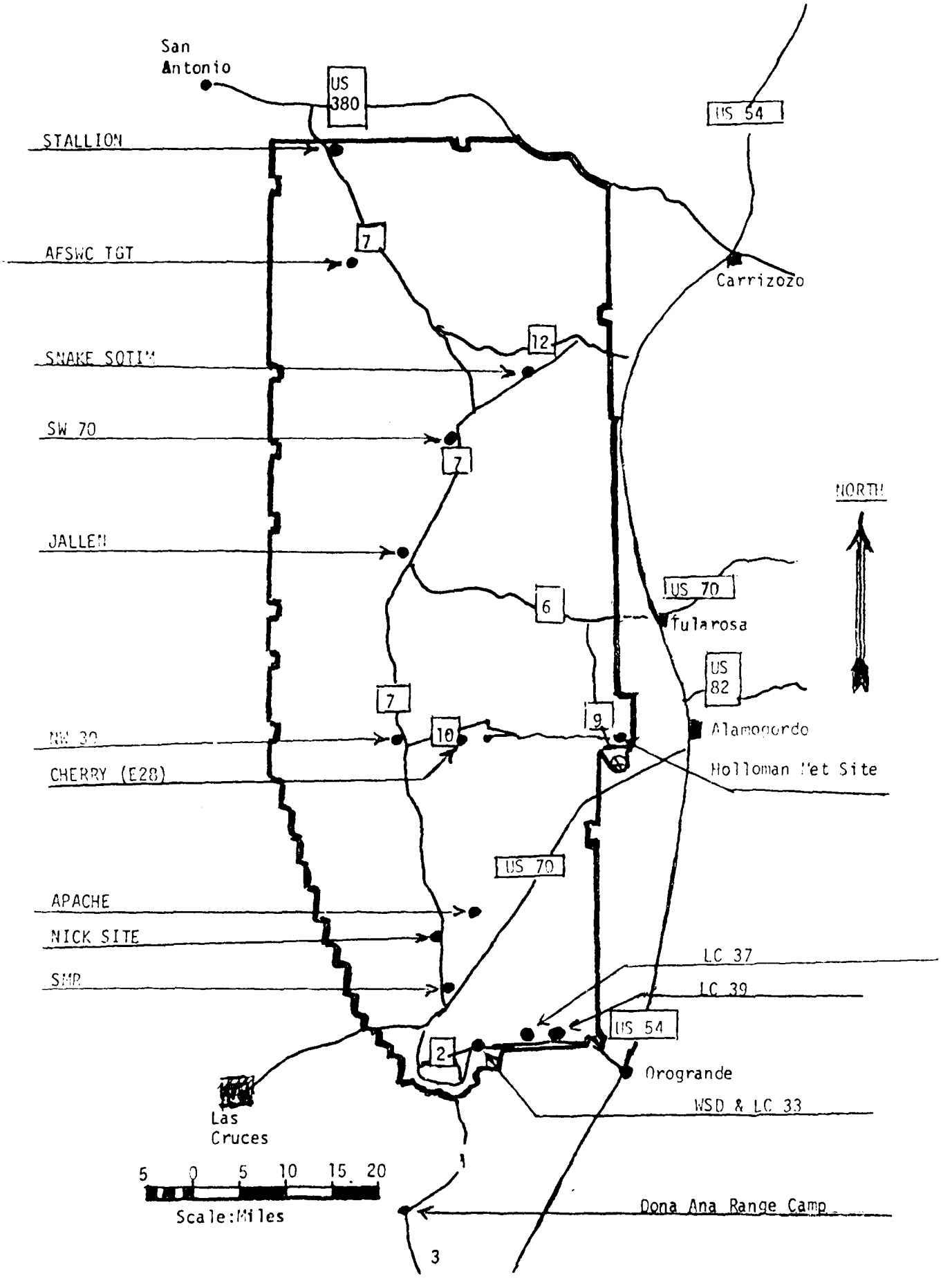
(1) Low level wind data were obtained from Single Theodolite pibal observations at:

SITE AND ALTITUDE	
LC-33	2 KM
NICK	2 KM

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME	
WSD	0900 MDT
LC-37	1000 MDT
WSD	1100 MDT
LC-37	1200 MDT


LC-38
Launch Area
NORTH
WEST
1 inch = 250 ft
FIRING AZIMUTH
Y186,500
Anemometer Pole #3
Anemometer Pole #2
Y186,000
MET
Tower
T-9 Radar
L-579A
L-519A
L-851A
L-350A
Anemometer Pole #1
Y185,500
X485,000
X485,500
X486,000
L-600
Y185,000


San Antonio
US 380
US 54
STALLION
AFSWC TGT
7
Carrizozo
12
SNAKE SOTIM
SW 70
7
NORTH
JALLEN
US 70
6
Tularosa
US 82
7
9
Alamogordo
10
NW 30
CHERRY (E28)
Holloman Met Site
US 70
APACHE
NICK SITE
SMR
LC 37
LC 39
US 54
2
Orogrande
WSD & LC 33
Las Cruces
5 0 5 10 15 20
Scale:Miles
Dona Ana Range Camp
3

PROJECT SURFACE OBSERVATION

TABLE 1 STATION LC-33

DATE 11 July 1981 (DAY / MONTH / YEAR) X= 484,982.64 Y=185,957.73 H=3983

TIME MDT	PRESSURE mbs	TEMPERATURE °F	TEMPERATURE °C	DEW POINT °F	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY gm/m³	WIND DIRECTION degs Tn	WIND SPEED kts	WIND CHARACTER kts	VISIBILITY
1200	881.4		32.0		13.0	32	998	165	05		50+

OBSTRUCTIONS TO VISIBILITY	CLOUDS 1st LAYER AMT	1st LAYER TYPE	1st LAYER HGT	2nd LAYER AMT	2nd LAYER TYPE	2nd LAYER HGT	3rd LAYER AMT	3rd LAYER TYPE	3rd LAYER HGT	REMARKS
	3	CU	6500				0	CI	25,000	

PSYCHROMETRIC COMPUTATION

TIME: MDT	1200		
DRY BULB TEMP.	32.0		
WET BULB TEMP.	19.2		
WET BULB DEPR.	12.8		
DEW POINT	13.0		
RELATIVE HUMID.	32		

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS
1200 MDT
11 July 1981

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.24 Y185,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	158	04	T-30	176	04	T-30	162	04
T-20	159	03	T-20	172	03	T-20	183	04
T-10	141	02	T-10	201	01	T-10	174	04
T0.0	128	02	T0.0	209	01	T0.0	181	04
T+10	120	02	T+10	C A L M		T+10	193	04

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (102 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	141	04	T-30	158	04
T-20	143	04	T-20	164	02
T-10	152	03	T-10	155	04
T0.0	143	03	T0.0	139	04
T+10	123	04	T+10	147	05

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	150	04	T-30	134	06
T-20	158	05	T-20	137	07
T-10	148	06	T-10	143	08
T0.0	146	07	T0.0	132	06
T+10	142	06	T+10	134	07

TABLE 4

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 11 July 1981

SITE: LC-33
TIME: 1200 MDT
WSTM COORDINATES:
X= 485,135.76
Y= 185,919.24
H= 3,988.57

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	165	05
150	189	08
210	190	09
270	187	09
330	184	09
390	183	09
500	184	09
650	184	08
800	177	06
950	157	05
1150	150	05
1350	173	05
1550	179	05
1750	159	07
2000	170	07

SITE: NICK
TIME: 1200 MDT
WSTM COORDINATES:
X= 470,734.56
Y= 255,734.64
H= 4,126.57

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	203	06
150	184	06
210	180	06
270	179	06
330	177	06
390	179	06
500	185	06
650	184	06
800	182	07
950	180	08
1150	177	08
1350	171	07
1550	162	06
1750	158	06
2000	148	06

All data obtained from Single Theodolite Pilot-Balloon Tracked Observations.

TABLE 5

AIMING AND T-Time COMPUTER MET MESSAGES

WSD 0900 MDT
METCM1324064
111500122883
00373004 29980883
01300006 29890873
02306007 29640848
03307010 29380810
04309009 29160764
05348005 28840720
06294005 28450679
07307006 28050639
08283005 27740601
09309008 27440565
10305008 27090531
11252010 26800498
12246011 26390453

LC-37 1000 MDT
METCM1324063
111600124881
00364007 30360881
01348011 30100871
02312005 29750846
03274009 29400808
04323011 29140762
05374005 28810719
06306005 28390677
07292006 28020637
08291005 27690600
09315005 27410564
10338005 27040530
11273009 26720497
12240011 26300451

WSD 1100 MDT
METCM1324064
111700122882
00320005 30440882
01326009 30310872
02317010 30010848
03317011 29630810
04351009 29230764
05355006 28860721
06274005 28470679
07306003 28130640
08339005 27790602
09310008 27440566
10327006 27060531
11290012 26790499
12248012 26340453

LC-37 1200 MDT
METCM1324063
111800124880
00356008 30680880
01297011 30490870
02310010 30170846
03312014 29810808
04355008 29320763
05279006 28900719
06305008 28510678
07279006 28170638
08201004 27840601
09269006 27550565
10350008 28210531
11294008 26860498
12269013 26450453

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 81 0900 HRS MDT
ASCENSION NO. 447

SIGNIFICANT LEVEL DATA
19200211447
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
882.8	3989.0	24.3	15.5	58.0
850.0	5075.3	21.6	13.8	61.0
830.6	5732.8	20.0	13.5	66.0
811.2	6402.9	19.3	11.1	59.0
772.6	7777.9	17.0	11.1	68.0
753.4	8484.0	16.6	8.4	51.0
700.0	10527.8	12.0	6.1	67.0
642.2	12879.9	6.2	1.5	72.0
556.0	16724.7	-.2	-6.6	61.0
522.8	18336.2	-3.9	-8.0	73.0
500.0	19492.0	-5.3	-12.7	56.0
481.8	20446.1	-7.5	-19.3	38.0
466.0	21299.3	-8.8	-20.4	41.0
429.8	23883.7	-12.8	-31.0	20.0
400.0	25148.0	-16.1	-31.1	26.0
377.6	26564.8	-20.3	-29.8	42.0
357.0	27927.6	-22.2	-40.0	18.0
300.0	32051.8	-32.4	-46.1	19.0

UPPER AIR DATA

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 61 0900 HRS MDT
ASCENSION NO. 447

19200 20447
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	882.8	24.3	15.5	58.0	1026.1	674.4	210.6	4.1	1.000304
4000.0	882.5	24.3	15.5	58.0	1025.8	674.4	209.4	4.1	1.000304
4500.0	867.2	23.0	14.7	59.4	1012.6	672.9	190.8	5.7	1.000298
5000.0	852.2	21.8	13.9	60.8	999.5	671.4	180.9	7.6	1.000292
5500.0	837.4	20.6	13.6	64.2	986.2	670.0	175.1	9.7	1.000288
6000.0	822.8	19.7	12.5	63.2	972.2	668.9	172.3	11.1	1.000281
6500.0	808.4	19.1	11.1	59.6	957.5	668.1	172.2	10.8	1.000272
7000.0	794.2	18.3	11.1	62.9	943.3	667.2	171.1	10.1	1.000269
7500.0	780.3	17.5	11.1	66.2	929.3	666.3	168.6	8.9	1.000266
8000.0	766.5	16.9	9.7	62.7	915.2	665.4	172.2	8.3	1.000258
8500.0	753.0	16.6	6.4	51.1	901.0	664.7	178.1	7.7	1.000244
9000.0	739.5	15.4	6.5	55.0	888.3	663.5	187.2	6.5	1.000242
9500.0	726.4	14.3	6.4	59.0	875.8	662.2	193.9	5.4	1.000239
10000.0	713.4	13.2	6.3	62.9	863.6	660.9	189.4	4.4	1.000237
10500.0	700.7	12.1	6.1	66.8	851.5	659.6	180.6	4.1	1.000234
11000.0	688.0	10.8	5.2	68.0	839.9	658.1	171.2	4.5	1.000229
11500.0	675.5	9.6	4.2	69.1	828.4	656.6	170.6	5.2	1.000224
12000.0	663.2	8.4	3.3	70.1	817.1	655.1	172.5	6.0	1.000219
12500.0	651.2	7.1	2.3	71.2	806.0	653.6	172.5	6.2	1.000214
13000.0	639.3	6.0	1.3	71.7	794.7	652.2	172.4	6.4	1.000210
13500.0	627.4	5.2	.2	70.2	782.4	651.1	171.1	6.0	1.000205
14000.0	615.8	4.3	-.9	68.8	770.4	650.1	168.7	5.5	1.000200
14500.0	604.4	3.5	-2.0	67.4	758.5	649.1	161.5	4.9	1.000195
15000.0	593.1	2.7	-3.0	65.9	746.8	648.0	157.0	4.7	1.000191
15500.0	582.1	1.8	-4.1	64.5	735.3	647.0	159.3	5.4	1.000186
16000.0	571.3	1.0	-5.2	63.1	724.0	645.9	167.6	6.4	1.000182
16500.0	560.7	.2	-6.3	61.6	712.8	644.9	176.9	8.0	1.000178
17000.0	550.2	-.8	-7.0	63.1	702.1	643.7	179.8	8.6	1.000175
17500.0	539.8	-2.0	-7.3	66.8	691.7	642.3	180.0	8.9	1.000172
18000.0	529.6	-3.1	-7.7	70.5	681.5	641.0	167.7	8.7	1.000170
18500.0	519.5	-4.1	-8.6	70.6	671.1	639.8	156.6	9.0	1.000166
19000.0	509.6	-4.7	-10.6	63.2	660.0	638.9	148.7	9.7	1.000161
19500.0	499.8	-5.3	-12.7	55.8	649.0	638.1	141.5	10.3	1.000157
20000.0	490.2	-6.5	-16.0	46.4	639.5	636.6	140.5	10.4	1.000152
20500.0	480.8	-7.5	-19.7	36.9	629.9	635.2	140.5	10.5	1.000147
21000.0	471.5	-7.8	-23.5	27.0	619.6	634.8	140.9	10.3	1.000143
21500.0	462.3	-8.4	-26.9	20.9	607.9	634.1	140.4	10.4	1.000139
22000.0	453.3	-9.3	-27.7	20.7	595.2	633.0	139.5	10.4	1.000137
22500.0	444.4	-10.2	-28.5	20.5	582.6	631.8	139.9	10.8	1.000134
23000.0	435.7	-11.2	-29.4	20.3	570.1	630.7	142.0	11.4	1.000132

STATION ALTITUDE 3939.00 FEET MSL
11 JULY 81 0909 HRS MDT
ASCENSION NO. 447

UPPER AIR DATA
1920020447
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	427.2	-12.1	-30.3	20.1	569.8	629.6	130.1	11.6	1.000130
24000.0	418.8	-13.1	-31.0	20.6	560.9	626.4	128.4	11.9	1.000127
24500.0	410.5	-14.4	-30.9	22.9	552.5	626.8	123.1	11.4	1.000126
25000.0	402.4	-15.7	-31.0	25.3	544.3	625.2	117.3	10.9	1.000124
25500.0	394.3	-17.1	-30.5	30.0	536.3	623.5	109.5	9.8	1.000122
26000.0	386.4	-18.6	-30.0	35.6	528.6	621.7	101.1	9.0	1.000121
26500.0	378.6	-20.1	-29.8	41.3	521.0	619.9	99.2	9.2	1.000119
27000.0	370.9	-20.9	-32.5	34.3	512.0	618.9	101.0	10.2	1.000116
27500.0	363.3	-21.6	-36.1	25.5	503.0	618.0	107.0	12.5	1.000114
28000.0	355.9	-22.4	-40.1	18.0	494.3	617.0	108.6	14.5	1.000111
28500.0	348.5	-23.6	-41.1	18.1	486.4	615.5	103.7	16.3	1.000109
29000.0	341.2	-24.9	-42.1	18.3	478.6	613.9	99.1	17.6	1.000108
29500.0	334.1	-26.1	-43.0	18.4	471.0	612.4	94.9	18.9	1.000106
30000.0	327.1	-27.3	-44.0	18.5	463.5	610.9	95.7	21.2	1.000104
30500.0	320.3	-28.6	-45.0	18.6	456.1	609.3			1.000102
31000.0	313.6	-29.8	-46.0	18.7	448.9	607.8			1.000101
31500.0	307.1	-31.0	-47.0	18.9	441.8	606.2			1.000099
32000.0	300.7	-32.3	-48.0	19.0	434.8	604.7			1.000097

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 81 0900 HRS MDT
ASCENSION NO. 447

MANDATORY LEVELS
19200447
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 8

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL. HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5072.	21.6	13.8	61.	179.9	7.9
800.0	6790.	18.6	11.1	62.	171.9	10.6
750.0	8603.	16.3	6.4	52.	179.8	7.5
700.0	10517.	12.0	6.1	67.	180.2	4.1
650.0	12540.	7.0	2.2	71.	172.5	6.3
600.0	14687.	3.2	-2.4	67.	158.1	4.6
550.0	16988.	-.9	-7.0	63.	179.8	8.6
500.0	19464.	-5.3	-12.7	56.	141.5	10.3
450.0	22155.	-9.6	-28.0	21.	138.6	10.5
400.0	25105.	-16.1	-31.1	26.	115.4	10.6
350.0	28353.	-23.4	-40.9	18.	104.3	15.9
300.0	31987.	-32.4	-48.1	19.		

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 81 1000 HRS MDT
ASCENSION NO. 152

SIGNIFICANT LEVEL DATA
19201A0152
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 9

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
880.6	4051.4	28.3	15.2	45.0
876.2	4196.9	25.3	13.5	48.0
850.0	5070.4	22.6	13.4	56.0
828.8	5791.2	20.5	12.2	59.0
800.6	6771.4	18.0	11.8	67.0
781.8	7441.1	18.0	8.8	55.0
715.6	9913.2	13.4	6.0	61.0
700.0	10522.4	11.8	6.1	68.0
671.2	11673.8	8.7	3.1	68.0
644.6	12771.3	6.5	2.2	74.0
610.0	14254.5	3.6	-1.7	68.0
601.8	14616.0	3.0	-1.7	71.0
584.8	15378.3	1.5	-3.6	69.0
559.4	16552.9	.1	-6.7	60.0
518.8	18523.5	-4.6	-8.2	76.0
500.0	19477.6	-6.0	-15.0	49.0
479.8	20536.9	-7.7	-17.5	45.0
464.4	21369.8	-9.1	-23.1	31.0
449.6	22192.5	-10.3	-25.7	27.0
400.0	25121.7	-16.2	-36.4	28.0
377.8	26525.5	-20.2	-32.6	32.0
357.6	27861.0	-22.0	-37.8	20.0
344.4	28767.7	-24.3	-41.2	19.0
312.6	31067.4	-29.7	-45.4	20.0
300.0	32027.3	-32.8	-46.0	20.0

UPPER AIR DATA

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 81 1000 HRS MDT
ASCENSION NO. 152

19201A0152
LC-37
TABLE 10

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	880.6	28.3	15.2	45.0	1010.1	678.9	215.0	7.0	1.000297
4500.0	867.0	24.4	13.5	50.8	1000.3	674.3	193.6	6.9	1.000291
5000.0	852.1	22.8	13.4	55.4	990.1	672.5	181.1	7.2	1.000289
5500.0	837.3	21.3	12.7	57.8	980.9	670.8	170.0	7.8	1.000284
6000.0	822.7	20.0	12.2	60.7	971.4	669.2	161.8	8.6	1.000279
6500.0	808.3	18.7	11.9	64.8	962.6	667.7	161.5	9.5	1.000276
7000.0	794.1	18.0	10.8	62.9	954.3	666.8	163.9	10.0	1.000269
7500.0	780.2	17.9	8.8	55.1	946.7	666.4	171.5	9.9	1.000258
8000.0	766.3	17.0	8.2	56.4	939.2	665.3	179.5	9.7	1.000253
8500.0	752.7	16.0	7.7	57.6	932.0	664.2	187.9	9.6	1.000249
9000.0	739.4	15.1	7.1	58.8	924.9	663.1	195.4	8.1	1.000244
9500.0	726.3	14.2	6.5	60.0	918.1	662.0	200.3	6.2	1.000240
10000.0	713.4	13.2	6.1	62.0	911.6	660.9	201.4	4.3	1.000236
10500.0	700.6	11.9	6.1	67.7	905.9	659.4	198.3	2.7	1.000234
11000.0	687.9	10.5	4.9	68.0	900.8	657.7	179.2	3.5	1.000228
11500.0	675.5	9.2	3.6	68.0	895.8	656.0	171.0	4.8	1.000222
12000.0	663.2	8.0	2.9	69.8	891.1	654.7	171.0	6.4	1.000218
12500.0	651.1	7.0	2.5	72.5	886.1	653.5	171.5	6.8	1.000215
13000.0	639.1	6.1	1.6	73.1	881.2	652.3	171.5	6.6	1.000210
13500.0	627.4	5.1	.3	71.1	876.6	651.0	169.2	6.3	1.000205
14000.0	615.8	4.1	-1.1	69.0	871.1	649.8	166.3	6.0	1.000200
14500.0	604.4	3.2	-1.7	70.0	869.4	648.7	161.8	5.9	1.000196
15000.0	593.2	2.2	-2.6	70.0	864.9	647.5	158.0	5.8	1.000192
15500.0	582.1	1.4	-3.9	68.1	860.5	646.4	157.0	5.5	1.000187
16000.0	571.2	.3	-5.2	64.2	856.3	645.0	160.7	5.0	1.000182
16500.0	560.5	.2	-6.6	60.4	852.0	644.9	163.7	4.8	1.000178
17000.0	549.9	-1.0	-7.0	63.6	847.8	643.5	165.0	4.9	1.000175
17500.0	539.5	-2.2	-7.3	67.7	843.8	642.1	203.2	5.0	1.000172
18000.0	529.3	-3.4	-7.7	71.7	839.7	640.7	169.7	4.5	1.000170
18500.0	519.3	-4.5	-8.1	75.8	835.8	639.3	172.4	4.8	1.000167
19000.0	509.3	-5.3	-11.3	62.5	831.2	638.2	158.3	6.4	1.000161
19500.0	499.6	-6.0	-15.0	48.9	826.6	637.2	153.7	8.9	1.000155
20000.0	489.9	-6.8	-16.2	47.0	822.0	636.2	152.7	11.8	1.000152
20500.0	480.5	-7.6	-17.4	45.1	817.7	635.2	149.5	12.3	1.000149
21000.0	471.2	-8.5	-20.4	37.2	813.6	634.1	145.0	12.2	1.000144
21500.0	462.0	-9.3	-23.5	30.4	809.5	633.1	137.1	10.8	1.000141
22000.0	453.0	-10.0	-25.0	27.9	805.4	632.2	131.0	10.0	1.000138
22500.0	444.1	-10.9	-26.1	27.1	801.6	631.1	127.5	9.6	1.000135
23000.0	435.3	-11.9	-27.0	27.3	797.7	629.8	125.3	9.6	1.000133
23500.0	426.7	-12.9	-27.8	27.4	793.8	628.6	123.7	10.3	1.000131

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 81 1000 HRS MDT
ASCENSION NO. 152

UPPER AIR DATA
19201ee15z
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 10 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	410.3	-13.9	-28.6	27.6	561.9	627.4	119.7	10.8	1.000128
24500.0	410.0	-14.9	-29.4	27.8	555.0	626.2	115.6	11.3	1.000126
25000.0	401.9	-16.0	-30.2	28.0	544.2	624.9	110.2	11.1	1.000124
25500.0	393.9	-17.3	-31.0	29.1	536.0	623.5	104.5	10.9	1.000122
26000.0	386.0	-18.7	-31.7	30.5	528.2	621.6	98.9	10.6	1.000120
26500.0	378.2	-20.1	-32.5	31.9	520.5	619.6	97.3	10.6	1.000118
27000.0	370.5	-20.8	-34.6	27.7	511.4	618.9	98.1	10.8	1.000116
27500.0	363.0	-21.5	-36.9	23.2	502.3	618.1	100.5	12.3	1.000115
28000.0	355.5	-22.4	-39.2	19.8	493.8	617.0	100.6	13.9	1.000111
28500.0	348.2	-23.6	-40.5	19.3	486.1	615.5	97.6	15.8	1.000109
29000.0	341.0	-24.8	-41.6	19.1	478.4	613.9	97.2	17.3	1.000108
29500.0	333.9	-26.0	-42.5	19.3	470.7	612.5	97.7	18.5	1.000106
30000.0	327.0	-27.2	-43.4	19.5	463.1	611.0	95.2	21.3	1.000104
30500.0	320.2	-28.4	-44.3	19.8	455.6	609.6			1.000102
31000.0	313.5	-29.5	-45.2	20.0	448.2	608.1			1.000101
31500.0	306.9	-31.1	-46.5	20.0	441.6	606.1			1.000099
32000.0	300.4	-32.7	-47.9	20.0	435.1	604.1			1.000097

STATION ALTITUDE 4651.37 FEET MSL
11 JULY 81 1006 HRS MDT
ASCENSION NO. 152

MANDATORY LEVELS
19201B0152
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 11

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	5067.	22.6	13.4	56.	179.5	7.2
800.0	6787.	18.0	11.7	67.	161.3	10.0
750.0	8599.	15.8	7.6	58.	189.7	9.6
700.0	10512.	11.8	6.1	68.	197.4	2.7
650.0	12532.	7.0	2.4	75.	171.5	6.8
600.0	14678.	2.8	-1.9	71.	160.1	5.9
550.0	16977.	-1.0	-7.0	64.	195.4	4.9
500.0	19450.	-6.0	-15.0	49.	153.6	6.7
450.0	22135.	-10.3	-25.6	27.	129.9	9.9
400.0	25079.	-16.2	-30.4	23.	108.9	11.1
350.0	28327.	-23.3	-40.2	19.	98.5	15.3
300.0	31962.	-32.8	-48.0	20.		

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 61 1200 HRS MDT
ASCENSION NO. 448

SIGNIFICANT LEVEL DATA
19200[illegible]
WHITE SANDS

GEODETIC COORDINATES
32.40843 LAT DEG
106.37033 LON DEG

TABLE 12

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
882.2	3989.0	29.3	14.7	41.0
850.0	5070.4	25.0	17.0	46.0
795.8	6955.2	19.6	11.1	58.0
730.8	9348.3	14.7	5.0	52.0
700.0	10540.6	11.8	3.2	54.0
649.4	12592.5	7.6	1.9	67.0
631.8	13336.3	6.4	-.8	61.0
564.4	16348.3	.2	-3.0	63.0
555.8	16753.2	-.1	-6.3	54.0
523.4	18323.9	-4.4	-6.1	75.0
500.0	19507.9	-5.4	-14.6	48.0
468.0	21206.2	-8.4	-24.4	26.0
400.0	25154.6	-16.2	-32.9	22.0
372.8	26884.7	-20.5	-37.0	21.0
353.8	27814.9	-21.7	-36.5	20.0
300.0	32064.5	-32.2	-47.1	21.0

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 61 1200 HRS MDT
ASCENSION NO. 448

UPPER AIR DATA
19200 2040
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 13

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	882.2	29.3	14.7	41.0	1006.8	680.0	170.0	5.1	1.000294
4000.0	881.9	29.3	14.7	41.1	1006.6	679.9	170.1	5.1	1.000294
4500.0	866.8	27.3	13.7	43.4	996.3	677.6	172.5	6.3	1.000289
5000.0	852.1	25.3	12.7	45.7	986.1	675.2	174.1	7.6	1.000283
5500.0	837.3	23.8	12.3	48.7	976.0	673.5	175.2	8.9	1.000279
6000.0	822.8	22.3	12.0	51.9	965.8	671.8	175.5	10.0	1.000276
6500.0	808.6	20.9	11.6	55.1	955.8	670.2	178.9	10.5	1.000272
7000.0	794.5	19.5	11.0	57.9	934.9	668.6	184.2	10.6	1.000268
7500.0	780.5	18.5	9.7	56.6	926.9	667.2	189.7	9.9	1.000260
8000.0	766.7	17.5	8.4	55.4	914.1	665.9	196.5	8.7	1.000253
8500.0	753.2	16.4	7.1	54.1	901.5	664.6	200.7	7.9	1.000247
9000.0	739.9	15.4	5.9	52.9	889.0	663.4	203.5	7.1	1.000240
9500.0	726.8	14.3	5.0	53.5	876.7	662.0	201.6	6.0	1.000235
10000.0	713.8	13.1	5.2	58.6	864.6	660.7	191.1	4.7	1.000234
10500.0	701.0	11.9	5.2	63.6	852.6	659.5	174.1	4.3	1.000231
11000.0	688.3	10.9	4.5	64.7	840.4	658.1	158.2	4.8	1.000227
11500.0	675.9	9.8	3.7	65.4	828.3	656.8	155.5	5.3	1.000222
12000.0	663.6	8.8	2.8	66.1	816.4	655.6	157.2	5.6	1.000218
12500.0	651.6	7.8	2.0	66.9	804.7	654.3	162.7	4.6	1.000213
13000.0	639.7	6.9	.6	63.7	792.6	653.2	173.6	3.5	1.000207
13500.0	627.9	6.1	-.9	61.1	780.7	652.1	179.6	3.3	1.000202
14000.0	616.3	5.0	-1.8	61.4	769.2	650.8	185.2	3.3	1.000198
14500.0	604.9	4.0	-2.7	61.8	757.9	649.6	188.5	4.8	1.000194
15000.0	593.6	3.0	-3.6	62.1	746.7	648.3	178.7	6.2	1.000190
15500.0	582.6	1.9	-4.5	62.4	735.7	647.1	180.1	7.2	1.000186
16000.0	571.8	.9	-5.4	62.8	724.9	645.8	181.2	7.8	1.000182
16500.0	561.2	.1	-6.8	59.6	715.7	644.6	182.4	7.6	1.000178
17000.0	550.6	-.8	-8.1	57.3	702.6	643.7	182.1	7.1	1.000173
17500.0	540.2	-2.1	-8.0	64.0	692.7	642.1	179.2	6.4	1.000172
18000.0	529.9	-3.5	-8.1	70.7	683.0	640.5	174.5	6.1	1.000170
18500.0	519.9	-4.5	-9.9	71.0	672.7	639.2	168.5	6.2	1.000166
19000.0	509.9	-5.0	-11.6	59.6	661.1	638.0	167.1	8.8	1.000161
19500.0	500.2	-5.4	-14.6	48.2	649.6	636.8	166.5	12.0	1.000155
20000.0	490.5	-6.3	-17.1	41.6	639.5	636.6	166.5	14.0	1.000151
20500.0	481.0	-7.2	-19.9	35.1	629.4	635.7	165.5	15.6	1.000147
21000.0	471.8	-8.0	-23.0	28.7	619.4	634.6	157.6	13.9	1.000143
21500.0	462.6	-9.0	-25.0	25.7	609.6	633.4	146.7	12.5	1.000140
22000.0	453.5	-10.0	-26.1	25.2	599.9	632.2	135.6	11.9	1.000138
22500.0	444.5	-11.0	-27.2	24.7	590.3	631.0	128.2	11.6	1.000135
23000.0	435.8	-11.9	-28.3	24.2	580.9	629.8	121.5	11.5	1.000133

STATION ALTITUDE 3989.00 FEET MSL
11 JULY 71 1200 HRS MDT
ASCENSION NO. 448

UPPER AIR DATA
19200.0448
WHITE SANDS

GLODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 13 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	427.2	-12.9	-20.3	23.7	571.6	628.6	115.7	11.5	1.000130
24000.0	413.8	-13.9	-30.4	23.2	562.5	627.4	100.0	11.6	1.000128
24500.0	419.5	-14.9	-31.5	22.7	553.6	626.2	99.8	12.2	1.000126
25000.0	402.5	-15.9	-32.6	22.2	544.8	625.0	98.9	12.9	1.000124
25500.0	394.4	-17.1	-33.7	21.8	536.4	623.5	98.0	13.4	1.000121
26000.0	386.5	-18.3	-34.9	21.5	528.1	622.0	102.6	13.8	1.000119
26500.0	378.7	-19.5	-36.1	21.2	520.0	620.5	107.7	14.0	1.000117
27000.0	371.0	-20.6	-37.2	20.9	511.8	619.1	113.0	14.3	1.000115
27500.0	363.5	-21.3	-38.0	20.3	502.6	618.3	115.6	15.0	1.000113
28000.0	356.0	-22.2	-38.9	20.0	494.0	617.3	117.7	15.8	1.000111
28500.0	348.6	-23.4	-39.9	20.2	486.1	615.7	113.0	16.9	1.000109
29000.0	341.3	-24.6	-40.9	20.3	478.4	614.2	108.7	18.1	1.000108
29500.0	334.2	-25.9	-41.9	20.4	470.8	612.7	103.9	19.4	1.000106
30000.0	327.3	-27.1	-42.9	20.5	463.3	611.1	100.2	20.9	1.000104
30500.0	320.4	-28.3	-43.9	20.6	455.9	609.6	98.0	22.5	1.000102
31000.0	313.8	-29.6	-44.9	20.7	448.7	608.1			1.000101
31500.0	307.2	-30.8	-45.9	20.9	441.6	606.5			1.000099
32000.0	300.8	-32.0	-46.9	21.0	434.6	605.0			1.000097

STATION ALTITUDE 3989.00 FEET MSL
11 JULY AT 1200 HRS MDT
ASCENSION NO. 448

MANDATORY LEVELS
19209 448
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 14

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5067.	25.0	12.6	46.	174.5	7.8
800.0	6660.	20.0	11.3	57.	182.1	10.6
750.0	8517.	16.2	6.6	54.	201.2	7.7
700.0	10530.	11.8	5.2	64.	172.9	4.3
650.0	12554.	7.7	1.9	67.	163.7	4.5
600.0	14706.	3.6	-3.0	62.	179.3	5.5
550.0	17007.	-.9	-8.1	58.	182.0	7.1
500.0	19480.	-5.4	-14.6	48.	166.9	12.0
450.0	22169.	-10.3	-26.5	25.	131.3	11.7
400.0	25112.	-16.2	-32.9	22.	96.1	13.1
350.0	28363.	-23.2	-39.7	20.	113.9	16.7
300.0	31999.	-32.2	-47.1	21.		

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 61 1200 HRS M DT
ASCENSION NO. 153

SIGNIFICANT LEVEL DATA
19201AU153
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 15

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
879.6	4051.4	31.5	15.0	37.0
871.0	4340.4	29.3	15.1	42.0
850.0	5052.8	26.9	14.3	46.0
830.4	5728.3	24.6	12.9	48.0
800.4	6784.7	21.9	12.2	54.0
751.6	8566.1	16.6	10.2	66.0
722.8	9658.0	14.6	8.7	69.0
700.0	10546.6	12.6	5.0	52.0
657.4	12268.5	8.5	3.1	69.0
629.8	13431.1	6.1	.0	65.0
611.8	14211.6	4.8	-1.2	65.0
583.2	15491.9	2.5	-2.8	69.0
548.6	17112.6	.0	-7.5	57.0
540.0	17528.4	-1.1	-7.6	61.0
514.4	18796.6	-4.3	-8.2	74.0
500.0	19531.9	-5.4	-12.1	59.0
496.8	19697.8	-5.4	-14.6	48.0
480.2	20574.3	-6.1	-19.7	33.0
464.4	21432.2	-8.4	-19.3	41.0
448.6	22314.1	-9.5	-25.4	26.0
417.8	24112.2	-12.4	-30.7	20.0
400.0	25200.0	-15.6	-31.1	25.0
388.2	25941.6	-17.0	-33.1	23.0
359.6	27817.0	-21.0	-37.9	20.0
312.6	31168.9	-29.0	-44.8	20.0
300.0	32132.4	-31.7	-46.2	22.0

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 81 1200 HRS MDT
ASCENSION NO. 153

UPPER AIR DATA
19201.0155
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 16

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	879.6	31.5	15.0	37.0	99[illegible].4	682.5	[illegible]0.0	8.0	1.000292
4500.0	860.3	28.8	14.9	42.9	992.1	679.4	191.4	9.2	1.000292
5000.0	851.5	27.1	14.4	45.7	980.9	677.5	184.2	10.7	1.000288
5500.0	837.0	25.4	13.4	47.3	969.9	675.5	179.0	12.4	1.000281
6000.0	822.6	23.9	12.7	49.5	958.1	673.7	175.0	14.1	1.000277
6500.0	808.4	22.6	12.4	52.4	945.7	672.3	174.9	13.3	1.000273
7000.0	794.3	21.3	12.0	55.5	933.6	670.7	175.0	12.3	1.000269
7500.0	780.4	19.8	11.5	58.8	921.0	669.0	177.9	10.5	1.000265
8000.0	766.8	18.3	10.9	62.2	910.7	667.2	183.0	8.6	1.000261
8500.0	753.4	16.8	10.3	65.6	899.4	665.5	188.3	7.3	1.000257
9000.0	740.3	15.8	9.8	63.2	887.0	664.2	178.4	6.5	1.000249
9500.0	726.9	14.9	7.2	60.0	874.5	662.9	174.1	6.0	1.000241
10000.0	713.9	13.8	5.3	56.3	862.6	661.5	173.5	6.2	1.000233
10500.0	701.2	12.7	3.2	52.4	851.0	660.0	172.6	6.4	1.000225
11000.0	688.5	11.5	3.2	56.5	839.0	658.7	169.3	6.5	1.000223
11500.0	676.1	10.3	3.2	61.4	827.2	657.3	165.9	6.7	1.000221
12000.0	663.9	9.1	3.2	66.3	815.7	656.0	160.0	6.5	1.000218
12500.0	651.8	8.0	2.5	68.2	804.1	654.6	155.0	6.3	1.000214
13000.0	639.9	7.0	1.2	66.5	792.6	653.3	148.3	5.7	1.000209
13500.0	628.2	6.0	-.1	65.0	781.1	652.1	139.5	4.9	1.000204
14000.0	616.6	5.2	-.9	65.0	769.2	651.1	132.0	4.2	1.000199
14500.0	605.2	4.3	-1.5	65.9	757.4	650.0	130.3	3.5	1.000196
15000.0	594.0	3.4	-2.1	67.5	745.8	648.9	132.2	3.1	1.000192
15500.0	583.0	2.5	-2.6	68.9	734.4	647.9	146.1	4.4	1.000189
16000.0	572.1	1.7	-4.1	65.2	722.9	646.9	173.0	5.8	1.000184
16500.0	561.4	.9	-5.6	61.5	711.6	645.9	182.4	6.5	1.000179
17000.0	550.9	.2	-7.1	57.8	700.5	644.9	189.1	7.4	1.000174
17500.0	540.6	-1.0	-7.6	60.7	690.4	643.4	179.4	7.1	1.000171
18000.0	530.3	-2.3	-7.8	65.8	680.4	641.9	190.9	6.9	1.000169
18500.0	520.3	-3.6	-8.0	71.0	670.7	640.4	186.2	7.1	1.000167
19000.0	510.4	-4.6	-9.3	69.8	660.6	639.1	179.5	7.5	1.000163
19500.0	500.6	-5.4	-11.9	59.7	650.0	638.1	189.0	9.1	1.000158
20000.0	491.0	-5.6	-16.2	42.8	638.6	637.0	192.4	11.6	1.000151
20500.0	481.6	-6.0	-19.2	34.3	627.4	636.0	194.7	12.9	1.000147
21000.0	472.3	-7.2	-19.4	37.0	616.1	635.0	196.0	13.1	1.000145
21500.0	463.2	-8.5	-19.7	39.8	604.0	634.1	193.7	12.7	1.000143
22000.0	454.2	-9.1	-23.0	31.3	593.7	633.3	196.6	11.0	1.000139
22500.0	445.3	-9.8	-25.9	25.4	583.7	632.4	197.4	9.8	1.000135
23000.0	436.6	-10.6	-27.3	23.7	573.0	631.4	199.6	10.2	1.000133
23500.0	428.0	-11.4	-29.4	22.0	562.4	630.4	116.3	11.1	1.000130

STATION ALTITUDE 4051.37 FEET MSL
11 JULY 61 1200 HRS MDT
ASCENSION NO. 153

UPPER AIR DATA
19201B0153
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 16 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	419.7	-12.2	-30.3	20.4	560.0	629.4	111.0	12.3	1.000127
24500.0	411.4	-13.5	-30.7	21.8	551.8	627.8	107.4	13.3	1.000126
25000.0	403.2	-15.0	-30.9	24.1	543.9	626.1	106.5	13.5	1.000124
25500.0	395.2	-16.2	-31.9	24.2	535.5	624.6	105.0	13.6	1.000122
26000.0	387.3	-17.1	-33.3	22.9	526.8	623.5	109.0	13.3	1.000119
26500.0	379.5	-18.2	-34.6	22.1	518.3	622.2	112.0	13.0	1.000117
27000.0	371.8	-19.3	-35.8	21.3	510.0	620.8	116.0	12.6	1.000115
27500.0	364.3	-20.3	-37.1	20.5	501.8	619.5	119.0	12.3	1.000113
28000.0	356.9	-21.4	-38.3	20.0	493.8	618.2	119.4	12.1	1.000111
28500.0	349.5	-22.6	-39.3	20.0	485.9	616.7	117.0	12.1	1.000109
29000.0	342.3	-23.8	-40.3	20.0	478.1	615.2	113.0	13.2	1.000108
29500.0	335.2	-25.0	-41.4	20.0	470.5	613.7	110.1	14.7	1.000106
30000.0	328.2	-26.2	-42.4	20.0	463.0	612.2	106.0	16.1	1.000104
30500.0	321.5	-27.4	-43.4	20.0	455.6	610.6	102.1	17.5	1.000102
31000.0	314.8	-28.6	-44.4	20.0	448.4	609.3			1.000101
31500.0	308.2	-29.9	-45.2	20.7	441.4	607.6			1.000099
32000.0	301.7	-31.3	-46.0	21.7	434.6	605.9			1.000097

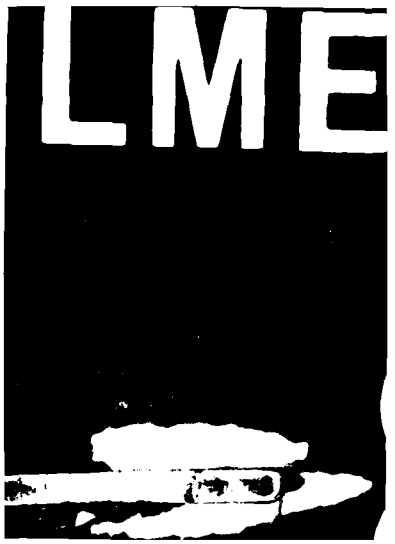
STATION ALTITUDE 4051.37 FEET MSL
11 JULY 61 1200 HRS MDT
ASCENSION NO. 153

MANDATORY LEVELS
19201 60153
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 17

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL.HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5049.	26.9	14.3	46.	183.6	10.9
800.0	6793.	21.9	12.2	54.	174.9	12.7
750.0	8618.	16.5	10.0	66.	182.2	7.1
700.0	10536.	12.6	3.0	52.	172.5	6.4
650.0	12563.	7.9	2.3	66.	154.1	6.3
600.0	14716.	3.0	-1.6	67.	129.4	3.2
550.0	17023.	.1	-7.3	58.	169.6	7.5
500.0	19504.	-5.4	-12.1	59.	169.4	9.3
450.0	22200.	-9.4	-24.7	27.	143.1	10.3
400.0	25157.	-15.6	-31.1	25.	106.1	15.5
350.0	28420.	-22.5	-39.2	20.	117.7	12.1
300.0	32067.	-31.7	-46.2	22.		


LME